CLAIMS:

1. An antigenic epitope which is a member of a group consisting of:

(i) an epitope consisting of a sequence in a member of a binding couple, which becomes substantially more accessible to antibodies or resumes a new conformation after binding of the two members to one another,

(ii) an epitope consisting of two or more sequences in a member of a binding couple which upon binding of the two members, become closely associated to form an antigenic epitope, and

(iii) an epitope consisting of two or more sequences, at least one being in one member of a binding couple, and at least one other being in the other member of the binding couple and upon binding of the two members, said two or more amino acid sequences become closely associated with one another to form an antigenic epitope;

said antigenic epitope being immunogenic.

2. An epitope according to claim 1, being revealed after antibody–antigen or ligand receptor binding.

3. An epitope according to claim 2, being revealed after virus or viral particle–receptor binding.

4. An epitope according to claim 3, being revealed after HIV or gp120–CD4 binding.

5. An epitope according to claim 4 capable of binding to a monoclonal antibody produced by the CG–10 hybridoma deposited with the European Collection of Animal Cell Culture (ECACC) under the accession No. 93020415.

6. An epitope according to claim 5 being the anti–idiotype of a mAb produced by the CG–10 hybridoma.

7. An epitope according to claim 4, consisting of a sequence in the gp120 protein.

8. An epitope according to claim 2, being revealed after binding of gp120 to an anti-gp120 antibody.

9. An epitope according to claim 8, consisting of a sequence present in the gp120 protein.

10. An antibody having binding specificity to an epitope according to any one of claims 1 to 9.

11. An antibody according to claim 10, having a binding affinity to a complex formed between two members of a binding couple, which is at least 5 fold higher than its binding affinity to either of the two members by themselves.

12. An antibody according to claim 10 having a binding affinity to a complex formed between two members of a binding couple, which is at least 10 fold higher than its binding affinity to either of the two members by themselves.

13. An antibody according to any one of claims 10 to 12, directed against an epitope which is revealed after binding of the HIV gp120 protein to the CD4 protein.

14. An antibody according to claim 13, directed against an epitope which consists of a sequence of the gp120 protein.

15. An antibody according to any one of claims 10 to 14, being a monoclonal antibody.

16. An antibody according to claim 15, being the CG-10 antibody.

17. An antibody having a binding affinity similar to that of the antibody of claim 16.

18. An anti-idiotype antibody of a mAb according to any one of Claims 10 to 17.

19. A hybridoma capable of secreting a monoclonal antibody according to any one of claims 15 to 17.

20. A hybridoma according to claim 19 deposited with the European Collection of Animal Cell Culture (ECACC) under the accession number 93020415.

21. An antibody according to any one of Claims 10 to 17, being conjugated to a cell cytotoxic substance.

22. An antibody according to any one of claims 10 to 17, being conjugated to a detectable marker.

23. A pharmaceutical composition for treating a viral infection comprising an antibody according to any one of claims 10 to 17 or a conjugate according to claims 21 or 22.

24. A method for treating a viral infection, comprising administering to a patient an effective amount of an antibody according to any one of claims 10 to 17 or a conjugate according to claims 21 or 22.

25. A method of diagnosis of a viral infection, comprising contacting the cells susceptible of viral infection with an antibody of any one of claims 10 to 17 and then detecting the presence of the antibodies on the cells' surface.

26. A method according to claim 25, wherein the cells are withdrawn from the patient and contacted with the antibodies *in vitro*.

27. A method of diagnosis of a viral infection, comprising contacting a body fluid sample with an antibody according to any one of claims 10 to 17 or with a conjugate according to claims 21 or 22 and detecting the formation of immunocomplexes involving said antibody or said conjugate.

28. A method for the detection of the presence in a body fluid of antibodies specific for an epitope according to any one of Claims 1 to 9, comprising contacting the body fluid or an antibody containing fraction thereof, with an anti-idiotype antibody according to Claim 18.

29. A method for immunizing an animal against a viral infection comprising administering to a subject an effective amount of an epitope according to any one of Claims 3 or 7 or an anti-idiotype antibody according to Claim 18.

AMENDED CLAIMS

[received by the International Bureau on 17 June 1994 (17. 06 .94); original claims 10,12,13,15,18,19,21-24 and 17-29 amended; remaining claims unchanged (3 pages)]

8. An epitope according to claim 2, being revealed after binding of gp120 to an anti-gp120 antibody.

9. An epitope according to claim 8, consisting of a sequence present in the gp120 protein.

10. An antibody having binding specificity to an epitope according to claim 1.

11. An antibody according to claim 10, having a binding affinity to a complex formed between two members of a binding couple, which is at least 5 fold higher than its binding affinity to either of the two members by themselves.

12. An antibody according to claim 10, having a binding affinity to a complex formed between two members of a binding couple, which is at least 10 fold higher than its binding affinity to either of the two members by themselves.

13. An antibody according to claim 10, directed against an epitope which is revealed after binding of the HIV gp120 protein to the CD4 protein.

14. An antibody according to claim 13, directed against an epitope which consists of a sequence of the gp120 protein.

15. An antibody according to claim 10, being a monoclonal antibody.

16. An antibody according to claim 15, being the CG-10 antibody.

17. An antibody having a binding affinity similar to that of the antibody of claim 16.

18. An anti-idiotype antibody of a mAB according to claim 10.

19. A hybridoma capable of secreting a monoclonal antibody according to claim 15.

20. A hybridoma according to claim 19, deposited with the European Collection of Animal Cell Culture (ECACC) under the accession number 93020415.

21. An antibody according to claim 10, being conjugated to a cell cytotoxic substance.

22. An antibody according to claim 10, being conjugated to a detectable marker.

23. A pharmaceutical composition for treating a viral infection comprising an antibody according to claim 10.

24. A method for treating a viral infection, comprising administering to a patient an effective amount of an antibody according to claim 10.

25. A method of diagnosis of a viral infection, comprising contacting the cells susceptible of viral infection with an antibody of claim 10, and then detecting the presence of the antibodies on the cells' surface.

26. A method according to claim 25, wherein the cells are withdrawn from the patient and contacted with the antibodies *in vitro*.

27. A method of diagnosis of a viral infection, comprising contacting a body fluid sample with an antibody according to claim 10, and detecting the formation of immunocomplexes involving said antibody or said conjugate.

28. A method for the detection of the presence in a body fluid of antibodies specific for an epitope according to claim 1, comprising contacting the body fluid or an antibody containing fraction thereof, with an anti-idiotype antibody according to claim 18.

29. A method for immunizing an animal against a viral infection comprising administering to a subject an effective amount of an epitope according to claim 3, or an anti-idiotype antibody of said epitope.